



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Carl Anderson, Ph. D. et al.      Art Unit : 2873  
Serial No. : 10/646,858      Examiner : Unknown  
Filed : August 22, 2003  
Title : METHOD AND APPARATUS FOR MEASURING AND COMPENSATING  
FOR SUBJECT MOTION DURING SCANNING

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Applicant submits the references listed on the attached form PTO-1449.

This statement is being filed before the receipt of a first Office action on the merits.

Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: 7/6/2004

Charles H. Sanders  
Reg. No. 47,053

Fish & Richardson P.C.  
225 Franklin Street  
Boston, MA 02110-2804  
Telephone: (617) 542-5070  
Facsimile: (617) 542-8906

20892589.doc

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

July 6, 2004

Date of Deposit

Signature

Nancy A. Tuttle

Typed or Printed Name of Person Signing Certificate

Substitute Form PTO-1449  
(Modified)U.S. Department of Commerce  
Patent and Trademark OfficeAttorney's Docket No.  
04843-043001Application No.  
10/646,858**Information Disclosure Statement  
by Applicant**

(Use several sheets if necessary)

Applicant  
Carl Anderson, Ph. D. et al.Filing Date  
August 22, 2003Group Art Unit  
2873**U.S. Patent Documents**

| Examiner Initial | Desig. ID | Document Number | Publication Date | Patentee | Class | Subclass | Filing Date If Appropriate |
|------------------|-----------|-----------------|------------------|----------|-------|----------|----------------------------|
|                  | AA        |                 |                  |          |       |          |                            |
|                  | AB        |                 |                  |          |       |          |                            |
|                  | AC        |                 |                  |          |       |          |                            |
|                  | AD        |                 |                  |          |       |          |                            |
|                  | AE        |                 |                  |          |       |          |                            |
|                  | AF        |                 |                  |          |       |          |                            |
|                  | AG        |                 |                  |          |       |          |                            |
|                  | AH        |                 |                  |          |       |          |                            |
|                  | AI        |                 |                  |          |       |          |                            |
|                  | AJ        |                 |                  |          |       |          |                            |
|                  | AK        |                 |                  |          |       |          |                            |

**Foreign Patent Documents or Published Foreign Patent Applications**

| Examiner Initial | Desig. ID | Document Number | Publication Date | Country or Patent Office | Class | Subclass | Translation |    |
|------------------|-----------|-----------------|------------------|--------------------------|-------|----------|-------------|----|
|                  |           |                 |                  |                          |       |          | Yes         | No |
|                  | AL        |                 |                  |                          |       |          |             |    |
|                  | AM        |                 |                  |                          |       |          |             |    |
|                  | AN        |                 |                  |                          |       |          |             |    |
|                  | AO        |                 |                  |                          |       |          |             |    |
|                  | AP        |                 |                  |                          |       |          |             |    |

**Other Documents (include Author, Title, Date, and Place of Publication)**

| Examiner Initial | Desig. ID | Document  |
|------------------|-----------|---|
|                  | AQ        | Peter M. Bloomfield, et al., "The design and implementation of a motion correction scheme for neurological PET," Physics in Medicine and Biology, 48:959-978, 2003                          |
|                  | AR        | C. Dold, et al., "Updating of MRI Gradients Using a Infrared Tracking System to Compensate Motion Artifacts," Proc. Intl. Soc. Magn. Reson. Med. 11:742 (2004)                              |
|                  | AS        | Christian Dold, et al., "The compensation of head motion artifacts using an infrared tracking system and a new algorithm for fMRI," Fraunhofer-Institute for Computer Graphics, 1-7         |
|                  | AT        | Roger R. Fulton, et al., "Correction for Head Movements in Positron Emission Tomography Using an Optical Motion-Tracking System," IEEE Transactions on Nuclear Science, 49(1):116-123, 2002 |

Examiner Signature

Date Considered

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

|  |  |   |                               |
|--|--|---|-------------------------------|
| Substitute Form PTO-1449<br>(Modified)   | U.S. Department of Commerce<br>Patent and Trademark Office | Attorney's Docket No.<br>04843-043001     | Application No.<br>10/646,858 |
| <b>Information Disclosure Statement<br/>by Applicant</b><br>(Use several sheets if necessary)<br><br>(37 CFR §1.98(b)) |  | Applicant<br>Carl Anderson, Ph. D. et al. |                               |
|  |  | Filing Date<br>August 22, 2003            | Group Art Unit<br>2873        |

| <b>Other Documents (include Author, Title, Date, and Place of Publication)</b> |              |   |
|--|--------------|---|
| Examiner<br>Initial  | Desig.<br>ID | Document  |
|  | AU           | Roger R. Fulton, et al., "Errata to 'Correction for Head Movements in Positron Emission Tomography Using an Optical Motion-Tracking System'," IEEE Transactions on Nuclear Science, 49(4):2037-2038, 2002 |
|  | AV           | M. Zaitsev, et al., "Prospective Real-Time Slice-by-Slice 3D Motion Correction for EPI Using an External Optical Motion Tracking System," Proc. Intl. Soc. Mag. Reson. Med., 11:517, 2004                 |
|  | AW           | M. Zaitsev, et al., "Imaging of Freely Moving Objects by Means of Real-Time Image Coordinates Update Using an External Optical Motion Tracking System," Fraunhofer-Institute for Computer Graphics, 1-6   |
|  | AX           | M. Zaitsev, et al., "Prospective Real-Time Slice-by-Slice 3D Motion Correction for EPI Using an External Optical Motion Tracking System," Fraunhofer-Institute for Computer Graphics, 1-15                |

|  |                 |
|--|-----------------|
| Examiner Signature   | Date Considered |
| EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. |                 |